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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/844,923  
Filing Date: April 26, 2001  
Appellant(s): SIBLEY, ERIN H.

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Todd N. Snyder  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 27, 2009 appealing from the Office action mailed October 31, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

09/844,976

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,704,930 B1	Eldering et al.	3-2004
6,637,027 B1	Breslauer et al.	10-2003
6,711,379 B1	Owa et al.	3-2004
5,729,549	Kostreski et al.	3-1998

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-7, 9-12, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1) and Breslauer et al. (US006637027B1).

Regarding claim 1, Hendricks et al. (Hendricks) discloses a system of broadcasting (See Fig. 1) comprising:

a satellite (See Figs. 1 and 3, satellite);

a network operations center (operations center 202) uplinking electronic content (program signals) to said satellite (See Figs. 1 and 3; col. 5 lines 6-16 and col. 10 lines 1-51);

a terrestrial over-the-air digital broadcast center receiving said electronic content from said satellite (See Figs. 1 and 3, headend 208; col. 7 lines 11-34), generating an over-the-air digital television channel signal over a first portion (See Fig. 3, 216, other digital; col. 7 lines 29-34, Hendricks discloses the use of cellular networks for a delivery system wherein cellular networks wirelessly transmit television services/content via radio transmissions through the air or "over-the-air") of an allocated frequency spectrum (See Fig. 3, 216; col. 10 lines 28-51, the allocated frequency spectrum total bandwidth

includes analog signals, digital compressed signals, other digital, and up-stream) so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the other digital portion is less than the combined analog signals, digital compressed signals, other digital, and up-stream) to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the other digital portion is considered excess bandwidth because it is not being used by the other digital portion) and inserting digital over-the-air electronic content (See Fig. 3, 216, digital compressed signals; col. 7 lines 29-34) corresponding to the electronic content (program signals) into the excess bandwidth portion (See Fig. 3, 216; the bandwidth outside of the other digital portion); and

a user appliance receiving said electronic content (See Fig. 1, 220).

However, Hendricks does not explicitly disclose allocating a frequency spectrum for a digital television channel having a total bandwidth and that the user appliance uses conditional access software.

As discussed above, Hendricks discloses allocating a frequency spectrum for the whole communication media. Eldering et al. (Eldering) discloses a digital television system. Eldering discloses allocating a frequency spectrum for a digital television channel having a total bandwidth (See Fig. 1; col. 3 lines 6-24). Eldering also discloses generating an over-the-air digital television channel signal over a first portion (See Fig. 1, program 1) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 1, program 1 bandwidth is less than the total bandwidth of the channel) to form an excess bandwidth portion (See Fig. 1, any bandwidth outside of the program 1 bandwidth is considered excess bandwidth because it is not being used

by program 1) and inserting digital over-the-air electronic content (See Fig. 1, programs 2-7) into the excess bandwidth portion (See Fig. 1; the bandwidth outside of program 1 bandwidth). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks to allocate a frequency spectrum for a digital television channel having a total bandwidth and generate an over-the-air digital television channel signal over a first portion of the allocated frequency spectrum so that the first portion is less than the total bandwidth to form an excess bandwidth portion and inserting digital over-the-air electronic content into the excess bandwidth portion of the channel, as taught by Eldering, in order to provide a system that efficiently utilizes the bandwidth available in a digital channel between the headend and the user's equipment (See Hendricks col. 3 lines 20-22 and Eldering col. 1 lines 46-49).

Breslauer et al. (Breslauer) discloses a system that controls access to broadcast services. Breslauer discloses that a user appliance uses conditional access software (See Fig. 3, conditional access manager 314; col. 7 lines 26-27); the conditional access software allows the user appliance to access the content (See col. 8 line 42 – col. 9 line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user appliance disclosed by Hendricks to use conditional access software, as taught by Breslauer, in order provide a system that ensures that the user has permission (e.g. meets certain conditions) to view the content (See col. 1 lines 53-59).

Regarding claim 2, as disclosed in claim 1 rejection, Hendricks discloses a satellite (stratospheric platform) communicates (coupled) with the cable headend (over the air broadcast center).

Regarding claim 3, Hendricks discloses that one of the transmission media can be a cellular network (See column 7 lines 29-34), which inherently includes a "cell tower".

Regarding claim 4, Hendricks discloses different types of transmission media (e.g. cellular networks) to the home and suggests that similar technology can be used interchangeably (column 7, lines 29-34). However, Hendricks does not explicitly disclose a TV broadcast tower.

Official Notice is taken that it is well known in the art that TV broadcast towers are used as a transmission scheme. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering to include a TV broadcast tower in order to provide more versatility, options of transmission, and robustness of transmission in case of malfunction by one scheme (For support of the Official Notice; see 5,729,549 Fig. 1, col. 1 line 65 – col. 2 line 18).

Regarding claims 5 and 6, Hendricks discloses both digital audio and video (See column 5 lines 6-16).

Regarding claim 7, the set top terminals or "user appliance" is "fixed" (See Hendricks Fig. 1).

Claim 9 contains the limitations of claim 1 (wherein the system performs the method) and is analyzed as previously discussed with respect to that claim.

Claim 10 contains the limitations of claims 2 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 11 contains the limitations of claims 3 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 12 contains the limitations of claims 4 and 9 and is analyzed as previously discussed with respect to those claims.

Regarding claim 18, the user appliance receives the electronic content (program signals) without receiving the digital channel signal (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal does not receive the digital channel signal (other digital)).

Claim 19 contains the limitations of claims 18 and 9 and is analyzed as previously discussed with respect to those claims.

Regarding claim 20, wherein the user appliance disregards the digital television channel (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal disregards the digital television channel signal (other digital)).



Claim 21 contains the limitations of claims 9 and 20 and is analyzed as previously discussed with respect to those claims.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1) and Breslauer et al. (US006637027B1) as applied to claim 1 above, and further in view of Owa et al. (US006711379B1).

Hendricks in view of Eldering and Breslauer does not disclose that the “user appliance is mobile”.

Owa et al. (Owa) discloses a digital broadcasting system and terminal. Owa discloses mobile receiving terminals that can receive broadcasts from various sources (See Figs. 1, 23, and 24; col. 7 lines 21-35). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering and Breslauer to include mobile receiving terminals or “mobile user appliance”, as taught by Owa, in order to expand the capabilities of the system thereby making the system more convenient for the user by enabling the user to roam freely with the mobile terminal (See col. 1 lines 26-45).

#### **(10) Response to Argument**

Appellant argues with respect to claims 1 and 9 that Hendricks does not disclose an allocated bandwidth having excess bandwidth (See Brief page 5). However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses allocating a frequency spectrum of a communication media (See

Fig. 3, 216; col. 10 lines 28-51). Hendricks generates a first portion (See Fig. 3, 216, other digital) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the "other digital" portion is less than the combined "analog signals", "digital compressed signals", "other digital", and "up-stream") to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the "other digital" portion is considered excess bandwidth because it is not being used by the "other digital" portion). ) Hendricks also inserts digital over-the-air electronic content (See Fig. 3, 216, digital compressed signals; col. 7 lines 29-34) corresponding to the electronic content (program signals) into the excess bandwidth portion (See Fig. 3, 216; the bandwidth outside of the "other digital" portion). Also, Eldering discloses allocating a frequency spectrum for a digital television channel having a total bandwidth (See Fig. 1; col. 3 lines 6-24). Eldering also discloses generating an over-the-air digital television channel signal over a first portion (See Fig. 1, program 1) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 1, program 1 bandwidth is less than the total bandwidth of the channel) to form an excess bandwidth portion (See Fig. 1, any bandwidth outside of the program 1 bandwidth is considered excess bandwidth because it is not being used by program 1) and inserting digital over-the-air electronic content (See Fig. 1, programs 2-7) into the excess bandwidth portion (See Fig. 1; the bandwidth outside of program 1 bandwidth).

Appellant further argues with respect to claims 1 and 9 that Hendricks does not disclose allocating different portions for a first type of service such as digital television signals and then providing a second type of service such as electronic content through

an excess bandwidth portion (See Brief page 5). However, in light of the discussion above, Hendricks does disclose that feature. Hendricks discloses allocating the bandwidth to carry different types of services (See Fig. 3, 216).

Appellant also argues with respect to claims 1 and 9 that Eldering does not disclose combining the reception of electronic content in an excess bandwidth portion of a digital channel signal (See Brief page 6). The examiner has addressed this in the discussion above.

Appellant further argues with respect to claims 1 and 9 that Breslauer does not disclose that the electronic content is communicated through an excess bandwidth portion of a digital television signal and therefore the conditional access software does not allow access to content from excess bandwidth (See Brief pages 6-7). However, as discussed above, it is shown that it is well known to deliver content through an excess bandwidth portion. Breslauer discloses that a user appliance uses conditional access software (See Fig. 3, conditional access manager 314; col. 7 lines 26-27); the conditional access software allows the user appliance to access the content (See col. 8 line 42 – col. 9 line 12). The conditional access features are applied to the content in order to control access to the content. The medium in which the contents are delivered do not play a factor on the conditional access features. Therefore, one of ordinary skill in the art would recognize that the combination of Hendricks's and Eldering's feature of delivering content via excess bandwidth with Breslauer's feature of conditional access for content would yield a predictable result. That is, allowing conditional access features to content that is delivered via excess bandwidth.

Regarding claims 2 and 10, appellant argues that a satellite is not a stratospheric platform (See Brief page 7). However, reading the claims in the broadest sense, the satellite disclosed by Hendricks is coupled with the cable headend thereby meeting the limitations of the claim. Furthermore, appellant's specification does not disclose any examples of stratospheric platforms other than satellites. Therefore, a satellite meets the limitation of "stratospheric platform" wherein the satellite is a high altitude communications platform. Appellant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claims 3 and 11, appellant argues the network controller/cable headend of Hendricks (See Fig. 1) is not a cellular tower (See Brief page 8). However, Hendricks does disclose that the cable headend can be used with various other program delivery systems such as cellular networks, which inherently uses cellular towers (See Hendricks column 7 lines 29-34).

Regarding claims 4 and 12, appellant argues that a TV broadcast tower is not shown (See Brief page 8). However, Hendricks discloses different types of transmission media (e.g. cellular networks) to the home and suggests that similar technology can be used interchangeably (column 7, lines 29-34). The examiner took Official Notice that it is well known in the art that TV broadcast towers are used as a transmission scheme. Support for the Official Notice is found in Patent 5,729,549, Fig. 1, column 1 line 65 – column 2 line 18.

Appellant argues with respect to claims 18 and 19 that Hendricks does not disclose receiving electronic content without receiving the digital television channel signal (See Brief page 9). However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses that the user appliance receives the electronic content (program signals) without receiving the digital channel signal (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal does not receive the digital channel signal (other digital)). Appellant argues that tuning is different than not receiving. However, tuning is the function that allows the terminal to receive data. Therefore, data that is not tuned to is not received by the terminal.

Appellant argues with respect to claims 20 and 21 that Hendricks does not disclose disregarding the digital television channel signal (See Brief page 9). However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses that the user appliance disregards the digital television channel (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal disregards the digital television channel signal (other digital)). Appellant argues that tuning is different

than disregarding. However, tuning is the function that allows the terminal to receive data. Therefore, data that is not tuned to is disregarded by the terminal.

Regarding claims 5-8, appellant makes similar arguments with respect to claims 1 and 9, please see the discussion above. Furthermore, appellant makes reference to Beckmann with respect to claims 5-7. However, Beckmann was not applied in the rejection of these claims.

**(11) Related Proceeding(s) Appendix**

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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